

# **FCS IS**

an integrated program of  
innovations with  
revolutionary requirements for:

- **C4I**
- **Interoperability**
- **Lethality**
- **Survivability**
- **Mobility**
- **Deployability**
- **Manprint**
- **Supportability**

DISTRIBUTION STATEMENT A:  
Approved for Public Release  
Distribution Unlimited

**20060929055**



# SYSTEM GOALS

- C-130 transportable (<20 tons) (not tradable)
- 33-50% Decrease in logistics sustainment requirements
- 50% Decrease in fuel consumption
- 96 hours rapid response
- 5 days OPTEMPO operation without resupply
- 100 KPH burst speeds
- 60 KPH cross country speed-sustained



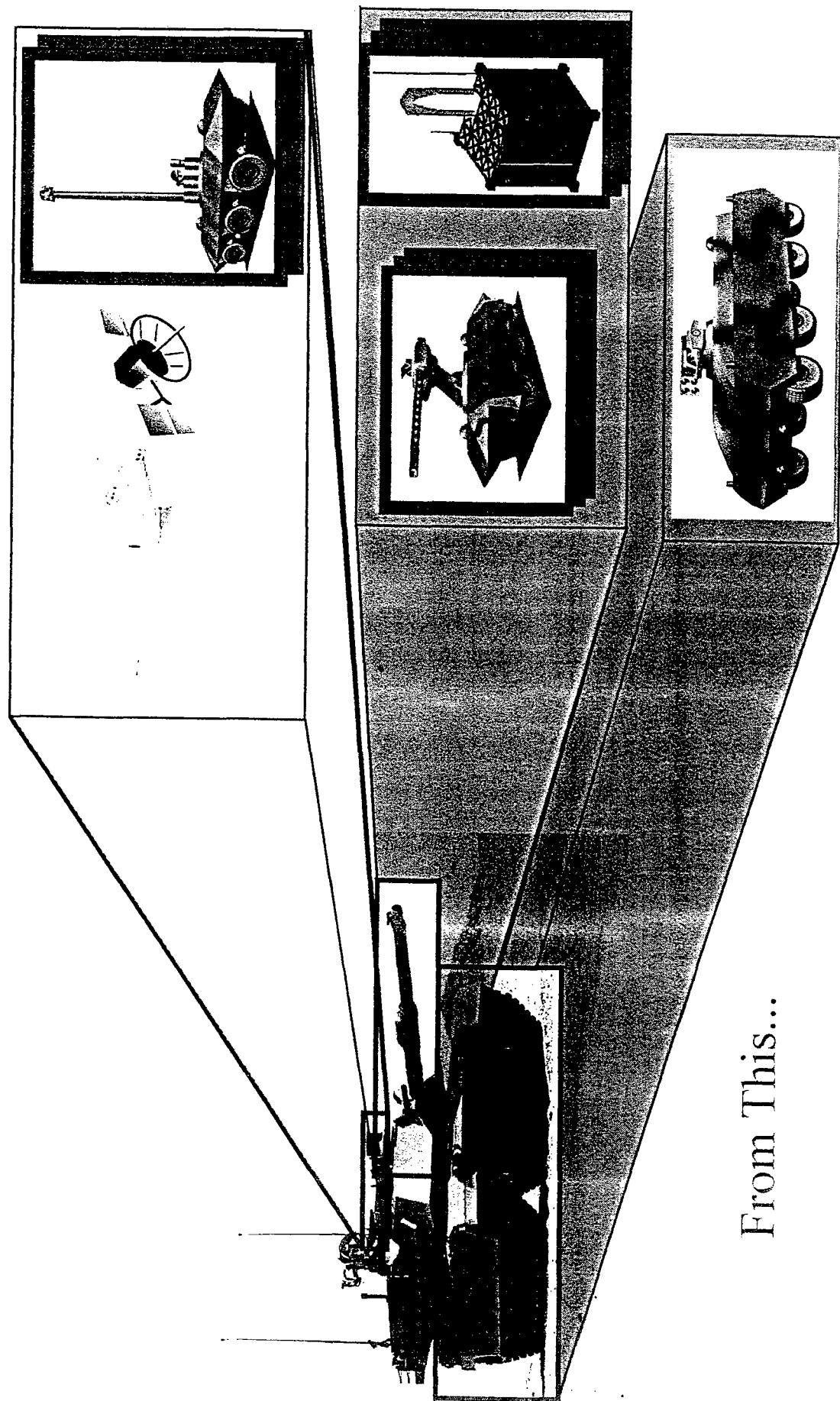
## ***AND IN ADDITION....***

- **FCS should:**
  - **Have capability of surviving first round engagement**
  - **Be affordable**
  - **Maximize commonality**
  - **Have joint & international interoperability**
  - **Utilize embedded training & human factors considerations**



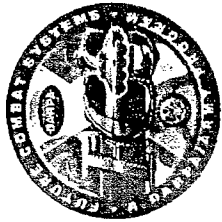
# Future Combat System Concept

(Exploit Battlefield Non-linearities using Technology to Reduce  
the Size of Platforms and the Force)

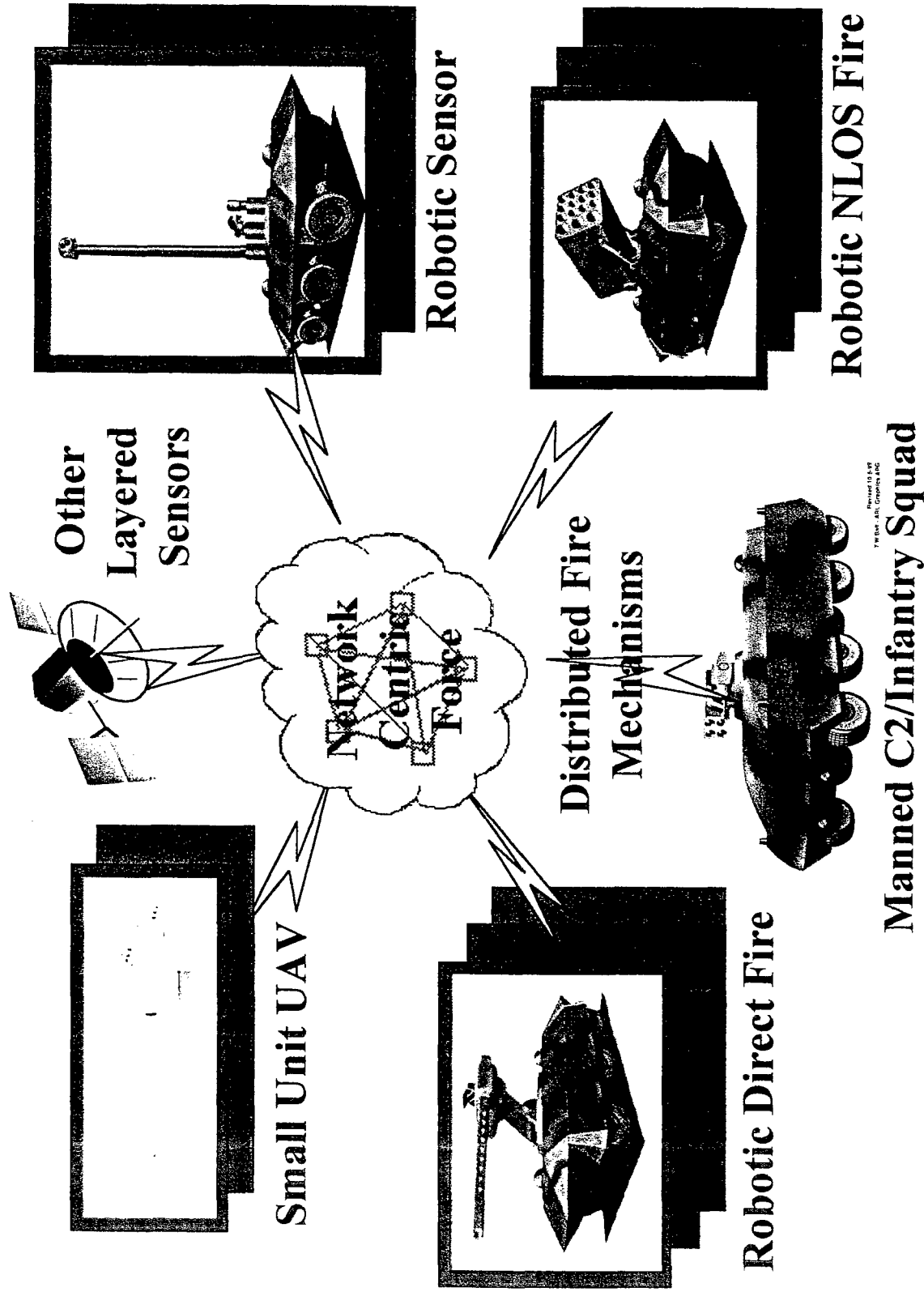


From This...

To This...



# The Transform... Network Centric Distributed "Tank"



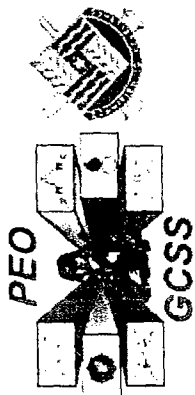
# ***IBCT Capabilities***

- ☐ Rapidly deployable
- ☐ Joint & Coalition interoperable
- ☐ Full spectrum
- ☐ Combat capable on arrival
- ☐ Precision, Internettted, Combined Arms fighting
- ☐ Decisive action through deliberate maneuver & Infantry assault
- ☐ Maintains freedom of maneuver

by:

- *High tactical mobility*
- *Situational understanding*

- ☐ Force effectiveness in complex and urban terrain
- ☐ Increased deployability and decreased sustainment footprint
- ☐ Reach operations for Strategic, Joint, Combined intelligence, analysis, logistics as well as fires and effects
- ☐ Operational mobility via C-130

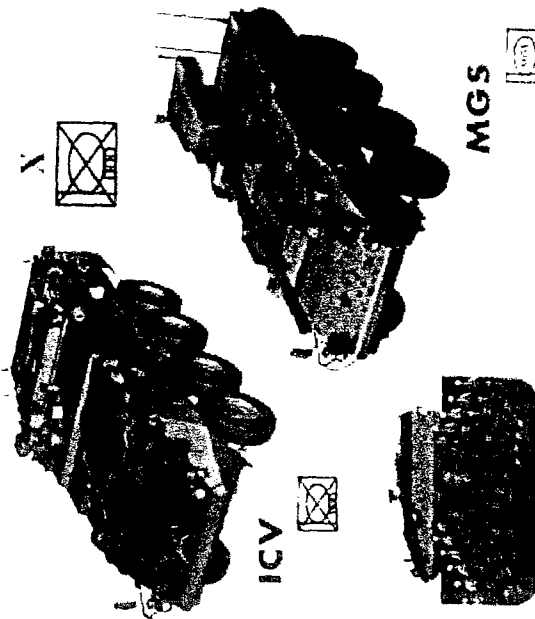


# The Interim Armored Vehicle Family



## Infantry Carrier Vehicle

(ICV)



- 8x8 Wheeled w/ Central Tire Inflation System & Run Flat
- High Hard Steel Structure
- Remote Weapon Station with cal .50 MG or MK19 40mm

## Mobile Gun System

(MGS)

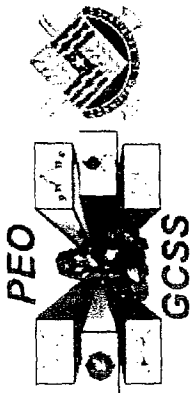
- Low Profile Turret
- M68A1 Cannon w/Autoloader
- Full Solution Fire Control

## Brigade Configuration

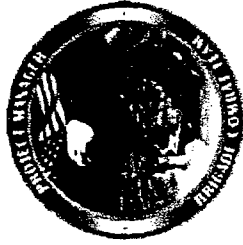
	Qty Ea Bde	ORF	TDA	TOTAL
INFANTRY CARRIER VEHICLE	108	6	30	714
ANTI-TANK GUIDED MISSILES	9	1	15	75
MORTAR CARRIER VEHICLE	36	2	13	241
RECONNAISSANCE VEHICLE	48	3	12	318
FIRE SUPPORT VEHICLE	13	1	15	99
ENGINEER SQUAD VEHICLE	9	1	13	73
COMMANDER'S VEHICLE	39	1	12	252
MEDICAL EVACUATION VEHICLE	17	1	10	118
NBC RECONNAISSANCE VEHICLE	3	1	13	37
MOBILE GUN SYSTEM	27	4	18	204
	309	21	151	
	X6	X6		
IBCTs	1854	126	151	2131
TOTAL IAV				

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# Infantry Carrier Vehicle Technical Characteristics



## Supportability

Integrated Electronic Technical Manual  
on Video Display Terminal  
For 3/2 ID and 1/25 ID  
Embedded IETMs Block Improvement  
Diagnostics Linked To Video Display Terminal  
Built-In Test  
Built-In Test Equipment  
Power Pack Display

## Survivability

14.5 mm Armor piercing Protection  
High Hard Steel Structure  
Modular Expandable Armor System  
Ceramic Layer  
Kevlar Spall Liner  
Ion Beam Processing  
Passive Rocket Propelled Grenade  
Add-on armor

## ICV



## Mission Capability

Carries 9 Man Infantry Squad And Crew of 2  
Kongsberg Protech Remote Weapon  
Station With M2 .50 cal Machine Gun or  
MK19 40mm Grenade Launcher  
2000 rounds .50 Cal or 448 rounds 40mm  
2 Javelin Missiles

## Mobility

60 MPH Top Speed  
9 Sec 50m Dash  
78 in Gap Crossing  
23 in Vertical Climb  
330 Mile Cruising Range  
53 Gal Fuel Capacity

## IAV Common Government Furnished Equipment and Associated Support Items Of Equipment

Force XXI Battle Command  
Battalion/Brigade and Below  
Enhanced Position Location  
Reporting System Global  
Positioning System Thermal  
Weapons Sight

## Transportability

37,798 lbs Combat Weight  
37,618 lbs Transport Weight

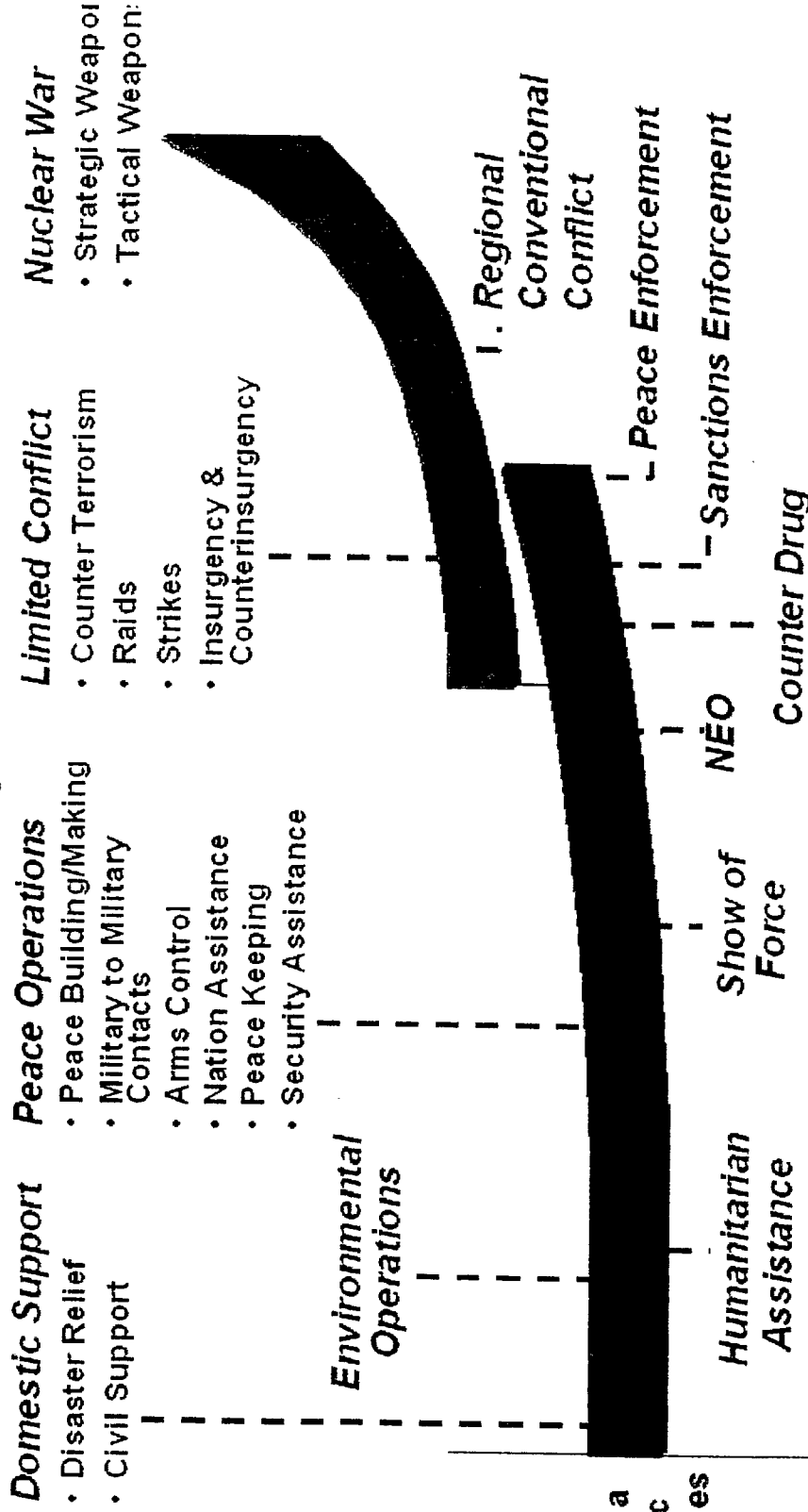
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# 21st Century Security Requirements

## Spectrum of Operations



### REQUIRE:

- Broad range of capabilities
- Strategic Responsiveness / Strategic Speed
- Dominance across the Full Spectrum of Operations

### Full Spectrum Challenges

- No single threat; a range of dynamic security challenges
- Increased threat from:
  - Asymmetric attacks on critical nodes
  - WMD proliferation
  - Terrorism

**The Objective Force Must Be:** Responsive, Deployable, Agile, Versatile, Lethal, Survivable, Sustainable

## OPSEC REVIEW CERTIFICATION

(AR 530-1, Operations Security)

I am aware that there is foreign intelligence interest in open source publications. I have sufficient technical expertise in the subject matter of this paper to make a determination that the net benefit of this public release outweighs any potential damage.

Reviewer: Douglas W. Templeton GS-15 TL, EMERGING TECHNOLOGIES  
 Name Grade Title  
Douglas W. Templeton 02 Aug 01  
 Signature Date

## Description of Information Reviewed:

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 Purpose of Release: Ground Vehicle Conference

An abstract, summary, or copy of the information reviewed is available for review.

Reviewer's Determination (check one)

☒ (1) Unclassified Unlimited.

2. Unclassified Limited, Dissemination Restrictions IAW \_\_\_\_\_

3. Classified. Cannot be released, and requires classification and control at the level of \_\_\_\_\_

## Security Office (AMSTA-CM-XS):

Concur/Nonconcur

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## Public Affairs Office (AMSTA-CM-PI):

Concur/Nonconcur

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